

## Site (Data) : Novi Han

Stock of waste as at December 2005

Country: BULGARIA

Reporting Year: 2005

Site Name: Novi Han

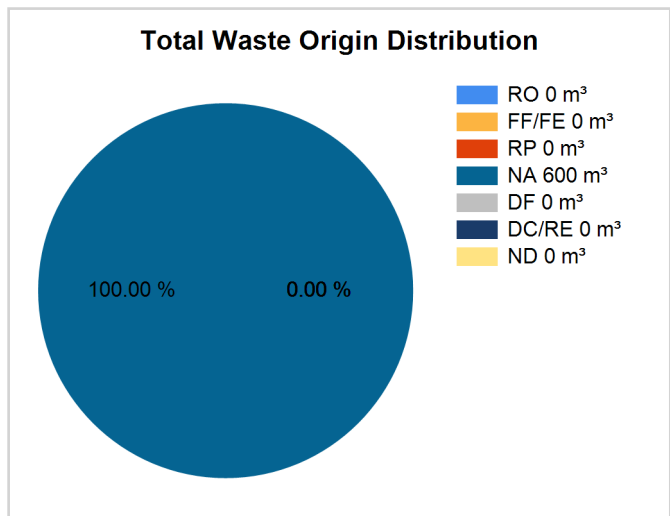
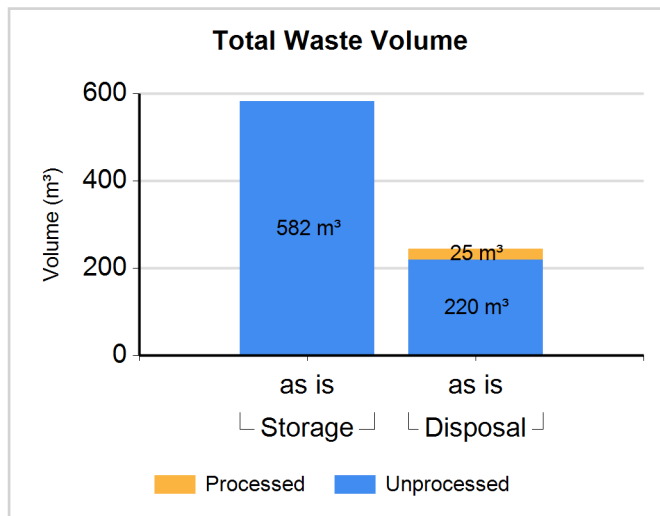
Full Name: Novi Han Repository

Inventory Reporting Date: December 2005

Waste Matrix Used: IAEA Def.

## Waste Inventory

Est=distribution is an estimate, Proc.=Is the waste processed (Yes/No)? RO=Reactor Operations, FF/FE=Fuel Fabrication/Fuel Enrichment, RP=Reprocessing, NA=Nuclear Applications,DF=Defence, DC/RE=Decommissioning/Remediation, ND=Not Determined



Note: where volume "as dispo" is provided, volume "as is" is used in the graph instead.

## Waste Class: LILW-SL

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
LILW-SL	Storage / Liquid	N	N	12.000	12.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00
LILW-SL	Storage / Stor2000	N	Y	250.000	250.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00
LILW-SL	Disposal / Accidental	N	N	100.000	100.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00
LILW-SL	Disposal / Biological	Y	N	25.000	25.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00
LILW-SL	Disposal / Solid	N	N	120.000	120.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00

Comment # 9919: Waste Storage facilities/Class LILW-SL/Site Novi H

Waste in "Liquid" is aqueous with very low activity below the release limits.

Reported waste amount in "Stor2000" is an (rough) estimate since the bulky waste represents less than one quarter of the total volume and the remaining part is spent sealed sources in different containers and devices. Main RNs - Cs-137 and Co-60.

## Waste Class: LILW-LL

Waste Class Name	Location / Facility	Proc	Est.	Volume "as is" (m³)	Volume "as dispo" (m³)	RO %	FF/FE %	RP %	NA %	DF %	DC/RE %	ND %
LILW-LL	Storage / Stor2000	N	Y	320.000	320.000	0.00	0.00	0.00	100.00	0.00	0.00	0.00

Comment # 9918: Waste Storage facilities/Class LILW-LL/Site Novi H

Waste amount is an (rough) estimate since this waste consists mostly of sealed sources of low activity in their original hosting devices (smoke detectors, etc.), subject of future dismantling and segregation. Main RNs: Am-241 and Pu-239.

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## Processing - Treatment method(s)

Method	Status			
	Planned	R&D program	Current practice method use over the last 5 years	Past Practice
Segregation/Sorting	N	N	Same	N
Wastewater Treatment	Y	N		N

## Processing - Conditioning method(s)

Method	Status			
	Planned	R&D program	Current practice method use over the last 5 years	Past Practice
Encapsulation	Y	N		N
Grouting	N	N		Y

## Spent Sources &lt;=30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)			c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 4GBq	Group II more than 4GBq but less than or equal 4E+4GBq	Group III more than 4E+4GBq					
	num/activity	num/activity	num/activity					
Ba-133	7			N	Y	N	3.720E-001	
	3.720E-001							
Cd-109	49			N	Y	N	2.550E+000	
	2.550E+000							
Ce-141	1			N	Y	N	4.000E-002	
	4.000E-002							
Ce-144	6			N	Y	N	8.850E-002	
	8.850E-002							
Cf-252	4			N	Y	Y	9.100E-002	
	9.100E-002							
Co-57	12			N	Y	Y	1.460E-003	
	1.460E-003							
Co-60		357		N	Y	Y	1.670E+003	
		1.670E+003						

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Co-60		36		N	Y	Y	6.270E+003	
		6.270E+003						
Cr-51	1			N	Y	N	4.000E-001	
	4.000E-001							
Cs-137	2962			N	Y	Y	3.420E+003	
	3.420E+003							
Eu-152	5			N	Y	N	1.000E-001	
	1.000E-001							
Fe-55	22			N	Y	Y	2.070E+001	
	2.070E+001							
H-3	21			N	Y	Y	3.920E-001	
	3.920E-001							
Kr-85	12271			N	Y	Y	4.710E+002	
	4.710E+002							
Na-22	16			N	Y	Y	6.540E-003	
	6.540E-003							
Pm-147	14			N	Y	Y	5.090E+001	
	5.090E+001							
Sr-90	741			N	Y	Y	1.560E+002	
	1.560E+002							
Tl-204	19			N	Y	N	2.000E+001	
	2.000E+001							

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## Spent Sources &gt; 30 years in Storage

Nuclide	Number of Sources/Total Activity of Sources (GBq)		c o n d	u n c o n d	c a t	Total Activity for all Groups (GBq)	Decay Date
	Group I less than or equal 2 GBq	Group II more than 2GBq					
	num/activity	num/activity					
Am-241		34447	N	Y	Y	7.870E+004	
		7.870E+004					
Am-241		16	N	Y	Y	3.740E+001	
		3.740E+001					
C-14	104		N	Y	N	5.000E+000	
	5.000E+000						
Cl-36	4		N	Y	N	4.630E+000	
	4.630E+000						
Pu-238	1462		N	Y	N	4.000E+002	
	4.000E+002						
Pu-239	70437		N	Y	N	8.930E+002	
	8.930E+002						
Pu-239		71	N	Y	Y	1.850E+003	
		1.850E+003					
Ra-226		1	N	Y	Y	2.400E+000	
		2.400E+000					
Ra-226	219		N	Y	Y	5.590E+000	
	5.590E+000						
Th-232	14		N	Y	N	1.780E-001	
	1.780E-001						

Comment

## # 7416: Neutron generators

Separately reported Am-241, Pu-239 and Ra-226 sources of lower number (16, 71 and 1) are in fact neutron generators (e.g. Am-241/Be).